

THE POLYPORACEAE OF JAMAICA

WILLIAM A. MURRILL

The fungi of Jamaica have been much neglected since the time of Olaf Swartz, who described only a few species, until recent years, when Dr. L. M. Underwood, Professor F. S. Earle, Dr. and Mrs. N. L. Britton, and others, either connected with expeditions sent out by the New York Botanical Garden or registered for investigation at Cinchona, have collected material upon which practically all of our accurate knowledge of the fungi of Jamaica is based.

The following list contains the species of polypores found in Jamaica, with the exception of a few white resupinate forms upon which I am not at present prepared to publish. The numbers here given are my own, unless otherwise stated. Mr. William Harris collected with me in the Cockpit Country. The localities and dates of my collections are as follows:

1. Rocky, shaded ravine east of Hope Gardens, 800 ft., dry region.
December 12, 1908.
2. Constant Spring Hotel Grounds and ravines in vicinity, 600 ft., rather dry region.
December 13, 1908.
3. Castleton Gardens, 600 ft., wet and shaded.
December 14-15, 1908.
4. Moore Town, 100-1000 ft., plantations in lowlands and virgin forests on hills, wet region.
December 16, 1908.
5. Blue Hole, Priestman's River, and inland road toward Manchioneal, 10-400 ft., mostly in cocoanut plantations recently established or in pastures, wet region.
December 17, 1908.
6. St. Margaret's Bay to Port Antonio, 5-50 ft., wet region.
December 18, 1908.
7. Chester Vale, 3000-4000 ft., wet, mountainous region.
December 21-24, 1908.
8. Cinchona, 4500-5200 ft., wet, mountainous region.
December 25-January 8, 1908-9.
9. Morce's Gap, 5000 ft., very wet, mountainous region; tree ferns and filmy ferns in abundance.
December 29, 30, January 2, 1908-9.
10. New Haven Gap, 5600 ft., wet, mountainous region.
January 4, 1909.
11. Monkey Hill to Sir John Peak, 5800-6100 ft., very wet, mountainous region.
January 5, 1909.
12. Hope Gardens and Constant Spring, 600 ft., lawns and thickets after rains.
January 9-10, 1909.

13. Troy and Tyre, Cockpit Country, 2000 ft., wet, wooded, limestone region. January 12-14, 1909.
14. Moneague to Union Hill, 1200-2200 ft., wet, wooded, limestone region. January 17-18, 1909.

Tribe PORIEAE

FOMITIPORELLA UMBRINELLA (Bres.) Murrill, N. Am. Flora 9:

13. 1907. Collected at Rose Hill in 1902 by F. S. Earle, and at Cinchona in 1906 by N. L. Britton.

FOMITIPORIA CINCHONENSIS Murrill, N. Am. Flora 9: 10. 1907.

- Described from specimens collected at Cinchona in 1902 by F. S. Earle.

FOMITIPORIA CUBENSIS Murrill, N. Am. Flora 9: 8. 1907. This species is usually seen on fence posts, growing in disk-shaped masses nearly an inch thick and several inches across.

Constant Spring Hotel, 36; Cockpit country, 1046.

FOMITIPORIA JAMAICENSIS Murrill, N. Am. Flora 9: 11. 1907.

- Described from specimens collected at Castleton in 1902 by F. S. Earle.

FOMITIPORIA TROPICALIS (Cooke) Murrill, N. Am. Flora 9: 8.

1907. The largest of all the resupinate species, attaining a thickness of nearly two inches and extending for many feet on the under surface of logs.

Priestman's River, 233; St. Margaret's Bay to Port Antonio, 241.

Fuscoporella castletonensis sp. nov.

Effused, inseparable, irregular, rigid, corky, 1-2 mm. thick; margin thin, adnate, irregular, fertile, ferruginous: context conspicuous, ferruginous to fulvous; hymenium somewhat uneven, pale-ferruginous to umbrinous; tubes grayish-umbrinous, very short, much less than 1 mm. long, mouths about 7 to a mm., regular, edges thin, entire, rigid: spores ellipsoid, smooth, pale-ferruginous, $4-5 \times 2-3 \mu$; cystidia straight, sharp, ferruginous, fulvous, abundant, 20μ long, $4-5 \mu$ thick at the base; hyphae ferruginous.

Type collected in Castleton Gardens, Jamaica, 200 m., on dead wood, December 14-15, 1908, *W. A. & Edna L. Murrill* 58.

FUSCOPORIA VITICOLA (Schw.) Murrill, N. Am. Flora 9: 4. 1907.

Found only at high elevations in Jamaica. Abundant in the eastern United States north of Florida.

Chester Vale, 344; Cinchona, 656; New Haven Gap, 756.

Tribe POLYPOREAE

Abortiporus tropicalis sp. nov.

Pileus distorted, spatulate to reniform, laterally stipitate, tough, flexible, becoming almost rigid when dry, $1-2 \times 2.5-3 \times 0.2-0.4$ cm.; surface spongy, finely tomentose, uneven, plane or depressed, rosy-ochraceous, anoderm; margin white, becoming reddish-brown when bruised, undulate to lobed, sterile; context white, duplex, with a firmer layer next to the tubes; tubes short, white within, mouths minute, invisible to the unaided eye, somewhat glistening, white, edges firm, obtuse to subacute, entire; spores globose, smooth, thin-walled, hyaline, copious, $4.5-6 \mu$; stipe ascending, expanding into the pileus, sometimes branched at the base, very irregular, cremeous, clothed like the pileus, tapering below, about 3 cm. long and 5-10 mm. thick.

Type collected in Hope Gardens, Jamaica, 200 m., attached to the base of a small dead stump, January 9-10, 1909, *W. A. Murrill* 836.

BJERKANDERA ADUSTA (Willd.) Karst. Medd. Soc. Faun. Fl. Fenn. 5: 38. 1879. All the specimens from the Cockpit Country and one collection from Chester Vale (348) represent a small form, quite different from the usual form of temperate regions, which latter I have from Chester Vale and Cinchona. Castleton Gardens, 78; Chester Vale, 303, 348; Cockpit Country, 890, 915, 974.

CERRENELLA FARINACEA (Fries) Murrill, N. Am. Flora 9: 74. 1908.

Chester Vale, 308½; Cinchona, 412; Cockpit Country, 844.

COLTRICIA SPATHULATA (Hook.) Murrill, N. Am. Flora 9: 93. 1908. Abundant in a grove on a southern slope.

Cockpit Country, 962, 1034, 1059.

CORIOLELLUS SEPIUM (Berk.) Murrill, Bull. Torrey Club 32: 481. 1905. This species is represented in Jamaica and Cuba by a darker, more irregular, and less reflexed form than the typical one of the eastern United States.

Chester Vale, 274; Morce's Gap, 679.

CORIOLOPSIS CAPERATA (Berk.) Murrill, N. Am. Flora 9: 77. 1908.

Cockpit Country, 891.

CORIOLOPSIS FULVOCINEREA Murrill, N. Am. Flora 9: 76. 1908.

Collected at Hope Gardens and Port Maria by Earle.

CORIOLOPSIS OCCIDENTALIS (Klotsch) Murrill, Bull. Torrey Club 32: 358. 1905. Abundant throughout the island.

Priestman's River, 209; Chester Vale, 356; Cockpit Country, 1114.

CORIOLOPSIS RIGIDA (Berk. & Mont.) Murrill, N. Am. Flora 9: 75. 1908.

Abundant throughout the island.

Castleton Gardens, 65; Priestman's River, 203; Chester Vale, 280; Cockpit Country, 878, 998; Moneague to Union Hall, 1121.

CORIOLOPSIS SUBGLABRESCENS Murrill, N. Am. Flora 9: 77. 1908.

Collected in the Cockpit Country in 1906 by L. M. Underwood.

CORIOLOPSIS TAYLORI Murrill, N. Am. Flora 9: 76. 1908.

Morce's Gap, 697.

CORIOLOPSIS VITTATA (Ellis & Macbr.) Murrill, N. Am. Flora 9: 76. 1908.

Chester Vale, 292.

CORIOLUS ARMENICOLOR (Berk. & Curt.) Pat. Tax. Hymén. 94.

1900. Collected at Mandeville by Cockerell. Difficult to distinguish from old and discolored *Coriolus membranaceus*. The type specimens are also much alike. However, I have excellent fresh specimens of *C. armenicolor* from Honduras, collected by M. E. Peck, that show the two species to be quite distinct.

CORIOLUS BRACHYPUS (Lév.) Murrill, Bull. Torrey Club 32: 646. 1906.

Coriolus effusus sp. nov.

Pileus very thin, flexible, broadly confluent, effused, shortly reflexed, the reflexed portion convex, laterally elongated, projecting 3-7 mm.; surface finely tomentose, white or pale-yellowish, slightly sulcate, especially near the margin, which is broadly sterile, milk-white, undulate: context thin, white, membranous; hymenium very irregular, varying according to the

position of the tubes, white or slightly yellowish; tubes very short, mouths circular or much elongated radially, edges thin, becoming lacerate-dentate or somewhat irpiciform: spores smooth, hyaline.

Collected at Chester Vale, Jamaica, 1100 m., on dead wood, December 22, 1908, *W. A. & Edna L. Murrill 261 (type)*, 309.

Cockpit Country, 888, 987, 1001, 1027.

Coriolus Hollickii sp. nov.

Pileus imbricate, substipitate, attached by a short, scutellate disk or tubercle, flabelliform, flexible to nearly rigid, rather thick for the genus, $4-6 \times 5-7 \times 0.5$ cm.; surface slightly radiate-rugose, multizonate, shallowly concentrically sulcate, opaque, glabrous, ochroleucous or ochraceous to pallid with pale-avenaceous zones; margin subacute, entire, fertile, concolorous: context milk-white, soft-corky, homogeneous, about 2 mm. thick; tubes stramineous within and without, becoming isabelline on drying, 2-3 mm. long, corky, rigid, mouths regular, nearly circular, glistening, 4-5 to a mm., edges thin, entire; spores hyaline.

Type collected at Union Hill, near Moneague, Jamaica, on a log in the woods, April 6-7, 1908, *N. L. Britton & Arthur Hollick 2779*.

CORIOLUS MAXIMUS (Mont.) Murrill, Bull. Torrey Club 34: 467. 1907. Very abundant throughout the island.

Cinchona, 472; Cockpit Country, 897.

CORIOLUS MEMBRANACEUS (Sw.) Pat. Tax. Hymén. 94. 1900. Very abundant throughout the island.

Constant Spring Hotel, 29; Moore Town, 153, 161; St. Margaret's Bay to Port Antonio, 243; Cinchona, 503; Cockpit Country, 883, 893, 908; Moneague to Union Hill, 1162.

CORIOLUS PAVONIUS (Hook.) Murrill, N. Am. Flora 9: 25. 1907. Abundant throughout the island.

Castleton Gardens, 108; Priestman's River, 179, 216; Chester Vale, 317; Hope Gardens and Constant Spring, 841; Cockpit Country, 874; Moneague to Union Hill, 1147, 1148.

Coriolus pertenuis sp. nov.

Pileus very thin, coriaceous, flexible, dimidiate, nearly plane, sessile by a narrow base, $2.5 \times 3 \times 0.1-0.2$ cm.; surface slightly concentrically furrowed, glabrous, stramineous; margin thin, entire, sterile, cremeous: context white, fibrous, membranous;

hymenium ochraceous when viewed at an angle, nearly fulvous when looked at perpendicularly; tubes punctiform, less than 1 mm. long, mouths very regular, angular, about 5 to a mm., edges thin, entire: spores smooth, hyaline.

Type collected at Chester Vale, Jamaica, 1100 m., on dead wood, December 22, 1908, *W. A. & Edna L. Murrill* 397.

CORIOLUS PINSITUS (Fries) Pat. Tax. Hymén. 94. 1900. Very abundant throughout the island.

Castleton Gardens, 94; Chester Vale, 318; Cinchona, 460; Cockpit Country, 1079; Moneague to Union Hill, 1168.

CORIOLUS SECTOR (Ehrenb.) Pat. Tax. Hymén. 94. 1900.

Cinchona, 612; Cockpit Country, 1091.

CORIOLUS VERSICOLOR (L.) Quél. Ench. Fung. 175. 1886. Seen only at high elevations. Previously collected on Rose Hill by Earle and on John Crow Peak by Underwood.

Cinchona, 465, 470, 502, 650; Morce's Gap, 704; New Haven Gap, 776.

CYCLOPORELLUS IODINUS (Mont.) Murrill, N. Am. Flora 9: 85. 1908.

East of Hope Gardens, 9, 11; Chester Vale, 303½; Cinchona, 657; Morce's Gap, 673½; Monkey Hill to Sir John Peak, 786; Cockpit Country, 990, 1100.

FLAVIPORUS RUFOFLAVUS (Berk. & Curt.) Murrill, Bull. Torrey Club 32: 360. 1905.

Castleton Gardens, 85.

FUNALIA VILLOSA (Sw.) Murrill, Bull. Torrey Club 32: 356. 1905.

Cockpit Country, 920, 1119.

HAPALOPILUS GILVUS (Schw.) Murrill, Bull. Torrey Club 31: 418. 1904. Abundant throughout the island.

Chester Vale, 257, 279; Cinchona, 628; Cockpit Country, 906; Moneague to Union Hill, 1182.

HAPALOPILUS LICNOIDES (Mont.) Murrill, Bull. Torrey Club 31: 417. 1904.

Constant Spring Hotel, 28; Priestman's River, 222; Chester Vale, 268, 285; Cockpit Country, 904, 979, 984.

- HEXAGONA CUCULLATA (Mont.) Murrill, Bull. Torrey Club 31: 332. 1904. Collected at Hollymount in 1906 by L. M. Underwood.
- HEXAGONA DAEDALEA (Link) Murrill, Bull. Torrey Club 31: 328. 1904.
Cockpit Country, 967, 969, 1042, 1110; Moneague, 1170.
- HEXAGONA FRAGILIS Murrill, Bull. Torrey Club 31: 329. 1904.
Described from specimens collected at Port Antonio in 1902 by F. S. Earle.
- HEXAGONA MAXONI Murrill, N. Am. Flora 9: 49. 1907. Collected on Blue Mountain Peak in 1903 by L. M. Underwood.
- HEXAGONA SUBCAPERATA Murrill, N. Am. Flora 9: 50. 1907.
Described from specimens collected at Port Antonio in 1902 by F. S. Earle.
Castleton Gardens, 54.
- HEXAGONA TESSELLATULA Murrill, Bull. Torrey Club 31: 330. 1904.
Cockpit Country, 1049.
- INONOTUS CORROSUS Murrill, Bull. Torrey Club 31: 598. 1904.
Collected at Troy in 1906 by L. M. Underwood.
- INONOTUS FULVOMELLEUS Murrill, N. Am. Flora 9: 87. 1908.
Described from specimens collected on Blue Mountain Peak in 1903 by L. M. Underwood, who also found it at New Haven Gap and on Sir John Peak. The species is known only from the Blue Mountains, at elevations of 5500 ft., or more.
New Haven Gap, 768; Sir John Peak, 810.
- INONOTUS JAMAICENSIS Murrill, Bull. Torrey Club 31: 597. 1904. Described from specimens collected by L. M. Underwood in 1903 on Mabess River, north of Cinchona and about 2000 ft. lower.
- IRPICIPORUS LACTEUS (Fries) Murrill, N. Am. Flora 9: 15. 1907.
Previously collected in the Cockpit Country by Underwood and at Cinchona by D. S. Johnson.
Cinchona, 486.
- MICROPORELLUS DEALBATUS (Berk. & Curt.) Murrill, Bull. Torrey Club 32: 483. 1905. Previously collected at Hollymount by L. M. Underwood.

Morce's Gap, 718; Sir John Peak, 796; Cockpit Country, 1074, 1102.

MICROPORELLUS PORPHYRITIS (Berk.) Murrill, N. Am. Flora 9: 53. 1907.

Cockpit Country, 1052.

NIGROPORUS VINOSUS (Berk.) Murrill, Bull. Torrey Club 32: 361. 1905.

Cockpit Country, 859.

POGONOMYCES HYDNOIDES (Sw.) Murrill, Bull. Torrey Club 31: 609. 1904. Very abundant throughout the island.

Cockpit Country, 889; Chester Vale, 359.

POLYPORUS ARCULARIUS (Batsch) Fries, Syst. Myc. 1: 342. 1821. Collected at Hope Hill in 1906 by D. S. Johnson.

POLYPORUS BLANCHETIANUS Berk. & Mont. Ann. Sci. Nat. III. 11: 238. 1839.

Cockpit Country, 1038; Moneague, 1132.

Polyporus praeguttulatus sp. nov.

Pileus subcircular in outline, convex above, nearly plane below, attached by a decurrent base, which causes the sporophore to appear triangular in section, $4 \times 4.5 \times 0.5$ –2.5 cm.; surface smooth, latericious, with a coating of fine, grayish tomentum, which disappears in numerous subcircular spots; margin slightly upturned, abruptly acute, concentrically striate, entire, cremeous: context pallid, soft-corky, homogeneous, 1 cm. thick behind; tubes stramineous, 3–4 mm. long, mouths subcircular to angular, larger near the margin, most of them about 3 to a mm., glistening, stramineous, edges thin, entire: spores smooth, ovoid, hyaline, $5\text{--}6 \times 2\text{--}3 \mu$; hyphae hyaline; stipe obsolete.

Type collected in Troy and Tyre, Jamaica, 650 m., on a log in woods, January 12–14, 1909, *W. A. Murrill & W. Harris* 1105.

POLYPORUS SCABELLUS (Pat.) Murrill, N. Am. Flora 9: 63. 1907. Collected at Morce's Gap in 1906 by D. S. Johnson.

POLYPORUS SUBELEGANS Murrill, N. Am. Flora 9: 62. 1907. Moore Town, 148; Cockpit Country, 971, 986, 997.

POLYPORUS TRICHOLOMA Mont. Ann. Sci. Nat. II. 8: 365. 1837. Common at low elevations on fallen branches and sticks.

Priestman's River, 225; Hope Gardens & Constant Spring, 831; Cockpit Country, 889½; Moneague to Union Hill, 1185.

PYCNOPORUS SANGUINEUS (L.) Murrill, Bull. Torrey Club 31: 421. 1904. Very abundant throughout the island.

Morce's Gap, 713; Cockpit Country, 921, 958.

RIGIDOPORUS SURINAMENSIS (Miq.) Murrill, Bull. Torrey Club 34: 473. 1907. Delighting in very wet logs. Difficult to distinguish from small specimens of *Fomes Auberianus*.

Castleton Gardens, 62, 132; Moore Town, 138; Priestman's River, 213, 219.

SPONGIPELLIS LURIDESCENS Murrill, N. Am. Flora 9: 39. 1907.

Described from specimens collected at Hall's Delight in 1902 by F. S. Earle.

TRAMETES CUBENSIS (Mont.) Sacc. Syll. Fung. 9: 198. 1891.

St. Margaret's Bay to Port Antonio, 254; Chester Vale, 350; Cockpit Country, 862, 914; Moneague to Union Hill, 1161.

TRAMETES HAVANNENSIS (Berk. & Curt.) Murrill, N. Am. Flora

9: 44. 1907.

Priestman's River, 196.

***Trametes jamaicensis* sp. nov.**

Pileus laterally connate, effused-reflexed, the reflexed portion triangular in section, convex above, concave below, corky, rigid, $1-1.5 \times 2-5 \times 0.5-0.8$ cm.; surface slightly uneven, finely tomentose, becoming nearly glabrous, whitish to discolored, opaque, anoderm, azonate; margin subobtuse, entire, fertile, concolorous: context homogeneous, soft-corky, white, 2-3 mm. thick; tubes 2-5 mm. long, rather slender, white within, mouths about 4 to a mm., slightly angular, glistening, edges thin, entire, rigid, white to slightly discolored: spores hyaline; cystidia none.

Type collected near Blue Hole, Jamaica, 60 m., on dead wood, December 17, 1908, *W. A. Murrill* 187.

TRAMETES SUBMURINA Murrill, N. Am. Flora 9: 43. 1907.

More abundant during the rainy seasons, as shown by the collections of F. S. Earle.

Priestman's River, 217, 226, 235; Castleton Gardens, 102.

***Trametes subscutellatus* sp. nov.**

Pileus tough to rigid, concave below, convex above, vertically attached, circular in outline, 1 cm. broad, 2 mm. thick; surface nearly smooth, with a thin pellicle, ochraceous, except at the vertex, where it is lateritious to castaneous; margin subobtuse or

acute, deflexed, white, entire: context white, firm, fibrous, homogeneous; tubes 1 mm. long, stramineous within and without, mouths regular, 4-5 to a mm., circular to slightly angular, glistening, edges obtuse, entire: spores hyaline; cystidia none.

Type collected between Moneague and Union Hill, Jamaica, 500 m., on dead wood, January 17, 1909, *W. A. & Edna L. Murrill 1129*.

TRICHAPTUM TRICHOMALLUM (Berk. & Mont.) Murrill, Bull. Torrey Club 31: 608. 1904. Collected at Mansfield near Bath in 1903 by L. M. Underwood.

TYROMYCES CAESIUS (Schröd.) Murrill, N. Am. Flora 9: 34. 1907. Abundant about Cinchona on dead branches of *Juniperus barbadensis*.

Castleton Gardens, 60; Cinchona, 453, 479, 541, 554, 572; New Haven Gap, 778.

Tyromyces cinchonensis sp. nov.

Pileus imbricate, flabelliform, attached by a narrow base, convex above, concave below, slightly flexible, becoming rigid and fragile when dry, $2.5 \times 2.5 \times 0.2-0.3$ cm.; surface milk-white, becoming suffused with avellaneous or very pale ardesiacous markings, perfectly glabrous, radiate-rugose; margin thin, undulate or eroded, deflexed on drying, concolorous: context white, thin, fibrous, rather tough for the genus; tubes white, much longer than the thickness of the context, averaging about 2 mm., mouths angular, regular, white with an ashy tint, glistening, 5-6 to a mm., edges thin, becoming slightly lacerate-dentate: spores cylindric, curved at times, smooth, hyaline, $4 \times 1.5-2.5 \mu$.

Type collected at Cinchona, Jamaica, 1670 m., on a coniferous log, December 25-January 8, 1908-9, *W. A. & Edna L. Murrill 500*. Also collected at the same time at the base of a dead sapling (*No. 509*).

TYROMYCES LACTEUS (Fries) Murrill, N. Am. Flora 9: 36. 1907.

These specimens differ somewhat from the usual form found in temperate regions and the spores are broader, measuring $3.5-4.5 \times 1.5-2.5 \mu$.

Cinchona, 516.

TYROMYCES LEUCOMALLUS (Berk. & Curt.) Murrill, N. Am. Flora 9: 36. 1907.

Cockpit Country, 1108½.

TYROMYCES PALMARUM Murrill, N. Am. Flora 9: 32. 1907.
Collected at Hope Gardens in 1902 by F. S. Earle.

Tribe FOMITEAE

Amauroderma Brittonii sp. nov.

Sporophores of immense size, two growing side by side and slightly united in the type collection; pileus circular in outline, nearly plane, rather soft when fresh, becoming rigid and fragile when dry, over 30 cm. broad in a dried condition and probably 50 cm. when fresh; surface uneven, somewhat sulcate, castaneous to fuliginous, pelliculose, pruinose, opaque, becoming very much wrinkled and uneven on drying; context punky when dry, avellaneous, homogeneous, bounded above and below by a thin, dark layer about 2 mm. thick; hymenium grayish when fresh, becoming brownish on drying and blackening where bruised; tubes minute, irregular, very short, less than 5 mm., much darker than the context, being dark-fumose in dried specimens, mouths slightly angular, 2–3 to a mm., stuffed when young, edges thin, entire, rigid; spores subglobose, slightly fuscous, finely asperulate, 7–8 μ : stipe subcylindric, short, central, slightly enlarged above and below, harder and more rigid than the pileus, encrusted, avellaneous, pruinose, glabrous, uneven, 10 cm. long, 6 cm. thick, no doubt larger in fresh specimens.

Type collected at Bachelor's Hall, Parish of St. Thomas, Jamaica, on a rotten log, September 15–19, 1908, *N. L. Britton* 3630.

AMAURODERMA RENATUM (Berk.) Murrill, N. Am. Flora 9: 117.
1908. Collected between Chapelton and Bull Head in 1906 by L. M. Underwood.

ELFVINGIA FASCIATA (Sw.) Murrill, Bull. Torrey Club 30: 298.
1903.
Cockpit Country, 846.

ELFVINGIA TORNATA (Pers.) Murrill, Bull. Torrey Club 30: 301.
1903. Abundant throughout the island. Common on fallen pine logs at Cinchona.

Cinchona, 404, 442, 611; Cockpit Country, 880; Moneague to Union Hill, 1156.

FOMES ANNOSUS (Fries) Cooke, Grevillea 14: 20. 1885. Seen only in the mountains.

Chester Vale, 305½; Cinchona, 411, 427, 535.

FOMES AUBERIANUS (Mont.) Murrill, Bull. Torrey Club 32: 491. 1905. *Boletus microporus*, of Swartz is probably this species, judging from the fact that the latter is conspicuous and generally distributed.

Castleton Gardens, 119; Priestman's River, 236; St. Margaret's Bay to Port Antonio, 250, 253, 255; Cockpit Country, 919, 1004, 1005.

FOMES GEOTROPUS Cooke, Grevillea 13: 119. 1884.

Cockpit Country, 944.

FOMES OHIENSIS (Berk.) Murrill, Bull. Torrey Club 30: 230. 1903.

Castleton Gardens, 126; Chester Vale, 398.

FOMES SAGRAEANUS (Mont.) Murrill, N. Am. Flora 9: 96. 1908. Chester Vale, 302.

FOMES SUBFERREUS Murrill, N. Am. Flora 9: 97. 1908.

Cockpit Country, 845, 944, 966, 1015.

FOMITELLA SUPINA (Sw.) Murrill, Bull. Torrey Club 32: 365. 1905. This species has been collected also near Kingston and at Bath, but it appears to be much less common in Jamaica than in Cuba and the Gulf States.

Cockpit Country, 910, 1033.

GANODERMA SUBINCRUSTATUM Murrill, N. Am. Flora 9: 122. 1908. Described from specimens collected at Hope Gardens in 1902 by F. S. Earle.

Constant Spring Hotel, 25.

GANODERMA TUBERCULOSUM Murrill, N. Am. Flora 9: 123. 1908. Cockpit Country, 871, 1018.

NIGROFOMES MELANOPORUS (Mont.) Murrill, Bull. Torrey Club 31: 425. 1904.

Cockpit Country, 930, 982.

PYROPOLYPORUS CALCITRATUS (Berk. & Curt.) Murrill, N. Am. Flora 9: 110. 1908.

Cockpit Country, 1044.

PYROPOLYPORUS CEDRELAЕ Murrill, N. Am. Flora 9: 105. 1908. Described from specimens collected at Bluefields in 1902 by F. S. Earle.

Pyropolyporus cinchonensis sp. nov.

Pileus woody, triquetrous, very thick and broadly attached behind, convex, $5-7 \times 8-12 \times 7-10$ cm.; surface horny-encrusted, glabrous, smooth, obscurely zonate, slightly sulcate, umbrinous to bay; margin very obtuse, ferruginous, slightly undulate, sterile: context rather hard, fulvous, zonate in recent layers, 0.5–2 cm. thick; tubes indistinctly stratified, avellaneous when young, becoming avellaneous-umbrinous, rather long and slender, sometimes 5 mm. or more long during a season, mouths minute, stuffed when young, circular, 5 to a mm., avellaneous-umbrinous, edges obtuse, entire: spores subglobose, smooth, pale-ferruginous, uniguttulate, 4μ ; hyphae ferruginous, $3-4\mu$; cystidia ferruginous-fulvous, pointed, ventricose, scanty, about 20μ long and $5-7\mu$ thick at the base.

Collected at Cinchona, Jamaica, 1500 m., on dead, standing, hardwood trunks in a dense virgin forest, December 25–January 8, 1908–9, *W. A. & Edna L. Murrill 446, 643 (type)*.

PYROPOLYPORUS EXTENSUS (Lév.) Murrill, *N. Am. Flora* 9: 110. 1908.

East of Hope Gardens, 5; Cockpit Country, 892, 913, 993.

PYROPOLYPORUS DEPENDENS Murrill, *N. Am. Flora* 9: 106. 1908.

Cockpit Country, 940.

PYROPOLYPORUS HAEMATOKSYLI Murrill, *Bull. Torrey Club* 30:

117. 1903. Described from specimens collected at Paradise in 1902 by F. S. Earle.

Pyropolyporus hydrophilus sp. nov.

Pileus small, woody, undulate, usually laterally attached, $2-3 \times 2-4.5 \times 2-3.5$ cm.; surface uneven, rugose, many times sulcate, bay to chestnut, with fuliginous lines, finely tomentose to nearly glabrous, horny-encrusted; margin subobtuse, melleous, entire: context scarcely 1 cm. thick, woody-punky, deep-ferruginous to fulvous; hymenium glistening, melleous when looked at from the side, olivaceous-umbrinous when viewed perpendicularly; tubes indistinctly stratified, fulvous with a grayish tint, 2–3 mm. long each season, mouths circular, 4–5 to a mm., edges obtuse, entire: spores subglobose, smooth, fulvous, uniguttulate, copious, thick-walled, $3.5-4.5\mu$; hyphae ferruginous, fulvous, 4μ ; cystidia none.

Collected at Morce's Gap, Jamaica, 1860 m., on dead, standing saplings, December 29, 30, January 2, 1908–9, *W. A. & Edna L. Murrill 700, 717 (type)*.

Pyropolyporus inflexibilis (Berk.) Murrill, N. Am. Flora 9: 104. 1908. Collected on Rose Hill by F. S. Earle, and at Morce's Gap, John Crow Peak, Green River, and Cinchona by L. M. Underwood.

Pyropolyporus jamaicensis Murrill, Bull. Torrey Club 30: 120. 1903. Described from specimens collected at Port Antonio in 1902 by F. S. Earle.

Pyropolyporus robinsoniae Murrill, N. Am. Flora 9: 108. 1908. Described from specimens collected on Monkey Hill in 1904 by Miss W. J. Robinson.

Pyropolyporus roseocinereus Murrill, N. Am. Flora 9: 104. 1908.
East of Hope Gardens, 1.

Pyropolyporus subpectinatus Murrill, N. Am. Flora 9: 109. 1908.
Union Hill, 1158.

***Pyropolyporus troyanus* sp. nov.**

Pileus woody, horny-encrusted, unguulate, rarely compressed-ungulate, usually plane below, sessile either by the vertex or laterally, 5-8 × 8-11 × 3-5 cm.; surface many times concentrically sulcate, slightly rimose in very old specimens, bay to nearly black, glabrous, even when young; margin slightly obtuse, entire or slightly undulate, ferruginous, sterile, slightly velvety: context woody, hard, about 1 cm. or less thick, fulvous, penetrated by dendroid markings of a black, horny appearance; tubes rather distinctly stratified, avellaneous-umbrinous, about 3 mm. long each season, mouths minute, about 8 to a mm., circular, fulvous, almost castaneous when young, edges obtuse, entire: spores globose, smooth, pale-yellowish, 3-4 μ; hyphae pale-yellowish; cystidia none.

Collected in Troy and Tyre, Jamaica, 650 m., on a dead log, January 12-14, 1909, *W. A. Murrill & Harris 980 (type) 1051*.

Pyropolyporus underwoodii Murrill, Bull. Torrey Club 30: 116. 1903. Collected near Kingston in 1906 by D. S. Johnson.

Tribe DAEDALEAE

Daedalea amanitoides Beauv. Fl. Oware 1: 44. pl. 25. 1805.
Abundant throughout the island.

East of Hope Gardens, 8; Cinchona, 583; Cockpit Country, 902.

GLOEOPHYLLUM BERKELEYI (Sacc.) Murrill, Bull. Torrey Club
32: 370. 1905.

Castleton Gardens, 70.

GLOEOPHYLLUM HIRSUTUM (Schaeff.) Murrill, Jour. Myc. 9: 94.
1903.

Chester Vale, 306½.

GLOEOPHYLLUM STRIATUM (Sw.) Murrill, Bull. Torrey Club 32:
370. 1905. Abundant at low elevations. First described by
Swartz as *Agaricus striatus*.

Cockpit Country, 1066; Moneague to Union Hill, 1171.

LENZITES EARLEI Murrill, N. Am. Flora 9: 128. 1908. De-
scribed from specimens collected at Port Antonio in 1902 by
F. S. Earle.